

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) An open/close cap which is screwed to a mouth portion of a pouring spout of a packaging container and adapted to open the mouth portion, the open/close cap comprising:

a cap body screwed to an outer peripheral surface of the mouth portion; ~~and~~

a band attached to the cap body so as to extend in a circumferential direction thereof so as to be engaged with the pouring spout;

a contact preventing portion provided for the outer peripheral surface of the cap body so as to extend outward from the outer peripheral surface thereof, the contact preventing portion having a shape inclining downward so that an extending lower end portion thereof has a diameter equal to at least an outer surface of the band for preventing an application of an external force to the band; and

a band shape maintaining member integrally formed on the cap body and projecting downward from a lower end surface of the cap body, the band shape maintaining member positioned to prevent the band from being pushed radially inward of the

open/close cap, the band shape maintaining member with an outermost diameter defining a predetermined gap between the band shape maintaining member and an inner surface of the band,  
wherein,

the band is provided with at least one portion for separating the band in the circumferential direction,

end portions of the separated band are connected to each other by a connection piece, which connection piece is to be cut off, at that one portion,

a protruded portion is formed to an inside of the band so as to project toward the pouring spout,

when the open/close cap is rotated in an opening direction with respect to the pouring spout, a forward side of the band between which the connection piece is snapped when rotated together with the cap body [[,]] and a rear side of the band is prevented from rotating by engagement of the protruded portion with a portion of the pouring spout,

the connection ~~pieces are~~ piece is cut off in the circumferential direction thereof by a stress of the band generated by the engagement, and

the band is positioned below the lower surface of the cap body so as to be attached to the lower portion of the cap body by a coupling piece, so that when the cap is removed, the band is removed together with the cap body, the cap body remaining attached to the band by the coupling piece with the

coupling piece connecting the inner surface side of the band and the lower surface of the cap body.

2. (cancelled).

3. (cancelled).

4. (currently amended) The open/close cap according to claim [[3]] 1, wherein the contact preventing portion is formed by extending at least a lower portion in a vertical direction of the cap body.

5. (cancelled).

6. (currently amended) The open/close cap according to claim [[5]] 1, wherein the band shape maintaining member is composed of a plurality of projections intermittently disposed to the lower end surface of the cap body in a circumferential direction thereof and spaced apart from a corresponding part of the inner surface of the band.

7. (currently amended) The open/close cap according to claim [[5]] 1, wherein the band shape maintaining member is an annular member projected from the lower end of the cap body, the

outermost diameter defining an annular shape free of contact with the band when the band is in a normal, non-deformed state.

8. (currently amended) The open/close cap according to claim [[5]] 1, wherein the cap body, the band shape maintaining member, the band, the connection piece and the coupling piece are integrally formed as a single piece ~~by an injection molding process.~~

9. (currently amended) The open/close cap according to claim [[5]] 1, wherein [[a]] the contact preventing portion comprises a plurality of ribs extending from an outer peripheral surface of the cap body in a circumferential direction, the ribs having a lower end flush with the lower end surface of the cap body and having [[a]] an outside diameter equal to at least [[an]] the outer surface of the band, ~~is provided for the outer peripheral surface of the cap body so as to extend outward from the outer peripheral surface with the outer diameter of the ribs defining the outer diameter of the contact preventing portion.~~

10. (currently amended) A method of manufacturing an open/close cap which comprises a cap body screwed to an outer peripheral surface of a pouring spout of a packaging container so as to open or close the pouring spout, a band disposed so as to

extend in the circumferential direction of the cap body and coupled to the cap body through a coupling piece, and a band shape maintaining member disposed to a lower portion of the cap body and defining a gap between the outer diameter of the band shape maintaining member and the inner diameter of the band, the band shape maintaining member for preventing crushing of the band in a radially inward direction through abutment of the inside portion of the band, and in which the band is provided, in a circumferential direction thereof, with at least one portion at which the band is separated in the circumferential direction, and at which end portions of the band are connected to each other by a connection piece, and the connection piece is cut off in the circumferential direction thereof by a stress caused at a time when the open/close cap is rotated with respect to the pouring spout and a protruded portion projecting toward the pouring spout from the inside of the band rides over a portion of the pouring spout, so that when the cap is removed, the band is removed together with the cap body, the cap body remaining attached to the band by the coupling piece, the coupling piece provided so as to connect the inner surface side of the band and the lower surface of the cap body,

the manufacturing method including an injection molding step for integrally molding the cap body, the band shape maintaining member, the connection piece and the coupling piece, wherein in the injection molding step, the band is connected to

the cap body by the coupling piece so that a gap between the upper end of the band and the lower end of the cap body is formed to be larger than a dimension between the lower end of the band shape maintaining member and the lower end of the cap body, and also including a pushing step for pushing the band toward the cap body, after the injection of the injection molding step, so that the band is positioned on the outer periphery side of the band shape maintaining member.

11. (cancelled).

12. (currently amended) The open/close cap according to claim 1, wherein,

the protruding portion comprises two overlapping trapezoidal protruded portions projecting from the inner surface of the band radially toward a center axis of the cap,

there are two of said connection piece,

the opening rotation of the cap body produces circumferential tension applied to the band to cut off the connection pieces with the connection pieces being separated in the circumferential direction, and a larger one of the two overlapping trapezoidal protruded portions displacing the band during the opening rotation, and

the opening rotation of the cap body removes the cap body and the band from the pouring spout, the cap and band

remaining integrally connected by the coupling piece maintaining the cap body integrally connected with the band upon removal from the pouring spout.

13. (currently amended) An open/close cap for opening and closing a pouring spout of a packaging container, the open/close cap comprising:

a cap body having a closed upper surface, an opened lower portion, a screw-shaped male screw formed in an inner surface of the cap body so as to be engageable with an outer peripheral surface of a mouth portion of the pouring spout, the cap body, as viewed from an upper portion of the cap body, i) a cap closing includes the cap body being rotated in the clockwise direction, the cap body being screwed downward and sealing the mouth portion, and ii) a cap opening includes the cap body being rotated in the counterclockwise cap opening direction, the cap body being disengaged from the pouring spout;

a contact preventing portion formed at the lower portion of the cap body, the contact preventing portion having a lower portion protruding radially outward and an outer surface thereof inclined obliquely downward, the contact preventing portion defining a lower end surface of the cap body;

a band provided at the lower portion of the cap body below the ~~contact~~ contact preventing portion and extending in a

circumferential direction of the cap body so as to be engaged with the pouring spout, the band divided into two band pieces;

connection pieces connecting circumferential ends of the two band pieces;

coupling pieces connecting the two band pieces to the lower end surface of the cap body, the coupling pieces disposed on an inner periphery side of the band pieces and the lower surface of the cap body,

a first of the coupling pieces disposed on a front side in a cap loosening direction and having a portion with a reduced thickness and width to be cut off at a time when the open/close cap is rotated in the opening direction,

a second of the coupling pieces disposed on a rear side in the cap loosening direction having an increased thickness and width so as not to be cut off when the cap is rotated;

claw portions formed on the inner peripheral surface of each of the band pieces, one of the claw portions disposed on a front end portion in the cap loosening direction and the another claw portion disposed to a rear side of the one claw portion in the cap loosening direction, the claw portions protruding from the inner surfaces of the band pieces and inclined in the cap loosening direction with respect to a radial direction directed to a center axis of the cap from the inner surface of the band pieces; ~~and~~



a protruded portion on each band piece projecting from the inner surfaces of the band pieces radially toward the center axis of the cap; and

a band shape maintaining member integrally formed on the cap body and projecting downward from a lower end surface of the cap body, the band shape maintaining member positioned to prevent the band from being pushed radially inward of the open/close cap, the band shape maintaining member with an outermost diameter defining a predetermined gap between the band shape maintaining member and an inner surface of the band, the band shape maintaining member extending downward into the band with a lower end of the band shape maintaining member being substantially aligned with a central portion of the band in a height direction, wherein,

the opening rotation of the cap body produces circumferential tension applied to the band by the claw portions to cut off the connection pieces with the connection pieces being separated in the circumferential direction, and the protruded portions displacing the band pieces after cutting off the connection pieces during the opening rotation, ~~and~~

the opening rotation of the cap body removes the cap body and the band from the pouring spout, the cap and band remaining integrally connected with the first of the coupling pieces being cut off by the opening rotation and the second of the coupling pieces not being cut off by the opening rotation

thereby maintaining the cap body integrally connected with the band upon removal from the pouring spout, and

with the cap removed, the band shape maintaining member remains entirely with the cap.

14. (previously presented) The open/close cap according to claim 13, wherein,

the protruding portions each comprise two overlapping trapezoidal protruded portions projecting from the inner surface of the band radially toward a center axis of the cap, and

the opening rotation of the cap body produces the circumferential tension applied to the band to cut off the connection pieces with the connection pieces being separated in the circumferential direction by a larger one of the two overlapping trapezoidal protruded portions displacing the band during the opening rotation.

15. (new) The open/close cap according to claim 1, wherein the band shape maintaining member has an annular shape and has an inner diameter equal to a inner diameter of an adjoining part of the cap body.

16. (new) The open/close cap according to claim 1, wherein the band shape maintaining member extends downward into the band with a lower end of the band shape maintaining member

being substantially aligned with a central portion of the band in a height direction.

17. (new) The open/close cap according to claim 1, wherein the band shape maintaining member extends downward into the band with a height approximately  $1/2$  a height of the band so that a lower end of the band shape maintaining member is substantially aligned with a central portion of the band in a height direction.

18. (new) The open/close cap according to claim 13, wherein the band shape maintaining member extends downward into the band with a height approximately  $1/2$  a height of the band so that a lower end of the band shape maintaining member is substantially aligned with a central portion of the band in a height direction.